

REMARKS

Applicant respectfully requests reconsideration in view of the amendment and following remarks. Support for amended claim 1 and newly added claim 13 can be found in the specification in paragraph no. 8 of the published specification (US 2004/0097691). Support for newly added claim 14 can be found in the specification in paragraph nos. 19 and 20 of the published specification (US 2004/0097691). Support for newly added claims 15 and 16 can be found in the specification in paragraph no. 15 of the published specification (US 2004/0097691). Support for newly added claims 17 and 18 can be found in the specification in paragraph no. 9 of the published specification (US 2004/0097691).

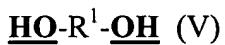
Claims 1-5 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent 4,377,667 to Sakurai et al. ("Sakurai"). Claims 6-7 and 9-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sakura in combination with U.S. Patent 4,431,794 to Sadlowski et al. ("Sadlowski"), USP 2003/0018104 to Mours et al. ("Mours") and applicant's disclosure. The applicant respectfully traverses these rejections.

Sakurai discloses oxymethylene polymers which have terminal groups of the formula $R_1O((CR_oR_o)_mO)_n$ or $R^2COO-((CR_oR_o)_mO)_n$. (see e.g. abstract and column 1 line 50-68). These terminal groups serve as molecular weight regulator and as terminal capping agents (column 1, line 41-47).

The present invention encompasses block polymers comprising blocks of oxymethylene homopolymers (possessing unit (I)) and blocks of structural unit (II) (see claim 1). One preferred embodiment encompasses block polymers comprising blocks of oxymethylene copolymers (possessing units (I) and (III) and blocks of structural unit (II) (see claim 3). The

method for preparation of the claimed block polymers preferably leads only to polymers comprising several blocks of structural unit (II) in the oxymethylene chain.

The applicant believes that the polymers encompassed from the present claim 1 are different from the polymers described in Sakurai in respect of the definition of the blocks of unit formula (II). The blocks of unit (II) derives from divalent hydroxy-terminated oligomers/polymers (see page 4 lines 4-14 of the description). In view of the divalent hydroxy-terminated character of the blocks of unit (II) claim 1 is made from polymers derived from oligomeric or polymeric blocks of unit (II) of formula (V)



(see page 5 line 27 of the description and claim 6). Sakurai encompasses only polymers which derives from (monovalent) hydroxy-terminated blocks, e.g. as shown in the examples 6-12 and the comparative examples 1 and 2. This is also shown in claim 1 of Sakurai wherein the used terminal blocks are described as an alkylene oxide adduct of an alcohol or a carboxylic acid, which leads to groups terminated by one alkoxy or one carboxy group and one hydroxy group.

The difference in the used blocks leads to different resulting polymers. The blocks unit (II) in the present invention are statistically introduced in the chain (on both ends of the blocks unit (II) are reactive hydroxyl groups), the alkoxy/carboxy- and hydroxy- terminated groups described from Sakurai (alkylene oxide adducts) leads to block polymers which possesses only terminal groups of the mentioned adducts. On the other hand with divalent hydroxy-terminated

blocks of unit (II) (blocks of formula (V)) it is not possible to prepare polymers as described from Sakurai.

It is important to be aware that polymers are always mixtures of molecules that differ from one another in their molecular properties (e.g. chain length). The macroscopic properties of the polymer are a result of the specific mixture of its molecules. The claimed polymers are mixtures of distinct structural different polymeric molecules. Again, Sakurai describes only polymers wherein all polymeric molecules possess the mentioned terminal groups. The polymer claimed in claim 1 of the present invention encompasses a mixture of polymeric molecules which possess blocks of unit (II) in any position in the chain. This leads to different polymers as described in Sakurai.

Because of the different structure of the capped polymers described in Sakurai and the block polymers described in the present invention also the physical, mechanical and chemical properties are different. The polymers described in Sakurai have optimized lubricity, wear and antistatic properties (see column 1, line 44-47), whereas the claimed block polymers of the present invention leads to impact-modified block polymers (see the applicant's specification at page 1, line 21-23).

The Examiner must consider the references as a whole, In re Yates, 211 USPQ 1149 (CCPA 1981). The Examiner cannot selectively pick and choose from the disclosed multitude of parameters without any direction as to the particular one selection of the reference without proper motivation. The mere fact that the prior art may be modified to reflect features of the claimed invention does not make modification, and hence claimed invention, obvious **unless the**

prior art suggested the desirability of such modification (In re Gordon, 733 F.2d 900, 902, 221 USPQ 1125, 1127 (Fed. Cir. 1984); In re Baird, 29 USPQ 2d 1550 (CAFC 1994) and In re Fritch, 23 USPQ 2nd. 1780 (Fed. Cir. 1992)). In re Gorman, 933 F.2d 982, 987, 18 USPQ2d 1885, 1888 (Fed. Cir. 1991) (in a determination under 35 U.S.C. § 103 it is impermissible to simply engage in a hindsight reconstruction of the claimed invention; the references themselves must provide some teaching whereby the applicant's combination would have been obvious); In re Dow Chemical Co., 837 F.2d 469, 473, 5 USPQ2d 1529, 1531 (Fed. Cir. 1988) (under 35 U.S.C. § 103, both the suggestion and the expectation of success must be founded in the prior art, not in the applicant's disclosure). The applicants disagree with the Examiner why one skilled in the art with the knowledge of the references would selectively modify the references in order to arrive at the applicants' claimed invention. The Examiner's argument is clearly based on hindsight reconstruction.

Obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention absent some teaching, suggestion, or incentive supporting this combination, although it may have been obvious to try various combinations of teachings of the prior art references to achieve the applicant's claimed invention, such evidence does not establish *prima facie* case of obviousness (In re Geiger, 2 USPQ 2d. 1276 (Fed. Cir. 1987)). There would be no reason for one skilled in the art to combine Sakura in combination with Sadlowski and Mours. For the above reasons, these rejections should be withdrawn.

Claim 3 is further removed from the rejections because claim 3 requires 1 to 3 groups of formula (III)

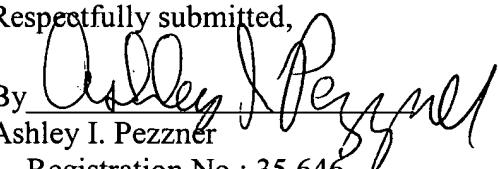
- (C_yH_{2y}-O-)_z (III),

(z is from 1 to 3). Sakura does not teach this. All the examples of Sakura have formula (III) present as a terminal group and require at least 8 groups being present (see examples 13-19 which require from 8 to 110 groups of formula (III) to be present as a terminal group). Therefore, Sakura teaches away from the applicant's claimed invention of claim 3.

In view of the above amendment, applicant believes the pending application is in condition for allowance.

A one month extension fee has been paid. Applicant believes no fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 03-2775, under Order No. 05587-00359-US from which the undersigned is authorized to draw.

Respectfully submitted,

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